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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,613	06/03/2005	Leena Silakoski	124096	4955
25944	7590	06/05/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER HUG, ERIC J	
			ART UNIT 1731	PAPER NUMBER
			MAIL DATE 06/05/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 10/537,613	<b>Applicant(s)</b> SILAKOSKI, LEENA	
	<b>Examiner</b> Eric Hug	<b>Art Unit</b> 1731	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "whose at least one layer". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyvonen (WO 02/053833) in view of Weatherly et al (US 4,501,782), Rexfelt (US 5,360,656), and Collette (US 5,713,399).

Hyvonen discloses a press felt, a base fabric for the press felt, and a method of manufacturing the press felt. The press felt comprises base fabric 2 and a batt fiber layer 1 on the side facing the web. See Figure 1. The felt may also comprise a batt fiber layer 3 on the

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opposite side. The base fabric is assembled prior to batt fiber attachment, by connecting the transverse jointing edges of one or more base fabric modules edge on edge to form a closed loop fabric. The connection is with a butt seam. The batt fiber layers are then attached to the base fabric, such as by needling. The connection of the base fabric at the seam area is carried out with stitches, ultrasound welding, gluing, melting, or any other suitable manner without any locking means belonging to the structure of the base fabric modules. See page 9, lines 1-23. The connection hold the ends of the base fabric modules immovably in place at least until the needling of the batt fiber layer is completed. The base fabric may be made of a first base fabric module woven into a closed loop and of a second base fabric module which is planar in shape and joined along the transverse edges as described above. This embodiment is shown in Figure 10c.

The press felt and base fabric of Hyvonen differ from those of the present invention in that the transverse joining area (seam) of the base fabric comprises a butt seam, rather than an overlapping seam as claimed.

Weatherly discloses an overlapping ultrasonically welded seam for bonding the transverse edges of thermoplastic webs. The technique is applicable for continuous loop type belts in a papermaking process in which a butt seam is normally formed by ultrasonic welding. The method for includes the steps of interdigitating the ends of the warps at opposing web edges after shute threads have been removed, and subsequently ultrasonically bonding across the width of the web so that the ends are crushed down and flattened over the corresponding shute. Weatherly particularly emphasizes several benefits of an overlapping seam versus a butt seam. See the Background section, columns 1 and 2. Therefore, at the time of the invention, it would

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have been obvious to one skilled in the art to replace the butt seam of Hyvonen with an overlapping seam that has been ultrasonically welded and compressed as taught by Weatherly to provide a better seam that is also easier to form.

The teachings of Rexfelt and Collette are further cited here to further illustrate how one may form an overlapping, ultrasonically welded seam.

Rexfelt discloses a press felt for a paper making machine. The fabric is made by spirally winding an endless strip of fabric into a base fabric of desired width, with the adjacent longitudinal edges of the strip being joined into a seam. Rexfelt shows an overlapping seam in Figure 7. According to Figure 7, the spacing between longitudinal threads is increased at the edges, and then the thinner edge portions are interlaced. This gives rise to an unchanged spacing between longitudinal threads in the area of transition. This does not give rise to an increased thickness in the seam area of transition. The edge joint can be achieved by sewing, melting, or ultrasonic welding, see column 2, lines 46-50.

Collette further exemplifies the ultrasonic welding technique as applied to an overlapping seam. The seam is compressed between the horn of the ultrasonic welding apparatus and an anvil, and the horn is activated to deliver ultrasonic energy thereto to effect the weld. The anvil is a rotatable cylindrical or wheel-like member having a circumferential surface against which the horn compresses the seam for closure. This gives rise to a compressed seam with thickness corresponding to the thickness of the rest of the fabric. Collette also discloses an overlapping length of 4 mm (see Example).

One arrives at the present invention by replacing the butt seam of Hyvonen with the overlapping seam formed as taught above to obtain the advantages thereof. The seam has the

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claimed features of thinned yarn density at the adjoining edges during seam formation and a permeability in the seam area after seam formation that matches that of the rest of the fabric.

***Information Disclosure Statement***

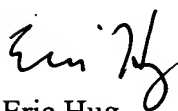
The information disclosure statement filed June 3, 2005 contains a document that was incorrectly cited. This document is the Hyvonen reference discussed above. Its correct citation is given on the attached form PTO-892.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eric Hug  
Primary Examiner